

ABSTRACT OF THE DISCLOSURE

A deformable mirror system comprises: a deformable mirror which includes a flexible thin film and a control electrode, the flexible thin film having a reflecting surface deformable by an electrostatic attractive force and an upper electrode, and the control electrode being arranged opposite to the upper electrode; and a power supply configured to apply a potential difference between the upper electrode and the control electrode of the deformable mirror, and to control the form of the reflecting surface of the deformable mirror to a desired form. The power supply controls the amount of deforming the reflecting surface by changing a duty ratio of a voltage applied across the upper electrode and the control electrode.